IDO GREENBERG

Scholar GitHub PyPI Website Blog LinkedIn

OBJECTIVE

I am an experienced researcher in algorithms and AI, eager to collaborate on innovative AI solutions that apply algorithmic and theoretical insights to real-world challenges.

PUBLICATIONS

- Greenberg, Mannor, Chechik, Meirom: Robust Meta RL, ***NeurIPS***, 2023
- Greenberg, Yannay, Mannor: How to Hack Kalman Filtering, ***NeurIPS***, 2023
- Belogolovsky, Greenberg, Eytan, Mannor: Individualized Dosing Dynamics via Neural Eigen Decomposition, ***NeurIPS***, 2023
- Greenberg, Chow, Ghavamzadeh, Mannor: Efficient Risk Averse RL, ***NeurIPS***, 2022
- Google Research: Planning in Open-Ended Dialogues via RL, *preprint*, 2022
- Greenberg, Mannor: Detecting Rewards Deterioration in RL, ***ICML***, 2021
- Greenberg, Shkolnisky: Common Lines Modeling for Reference Free Reconstruction in Cryo-EM, ***Journal of Structural Biology***, 2017
- Pragier, Greenberg, Cheng, Shkolnisky: A graph partitioning approach to simultaneous angular reconstitution, ***IEEE TCI***, 2016

ML-RELATED WORK EXPERIENCE

2023- **Nvidia** **Research intern**

- Accelerating SOTA solvers of NP-hard problems by up to 50% via RL

2022-2022 **Nvidia** **Research intern**

- Applying sampling methods for robust meta-RL [related paper]

2021-2021 **Google** **Research intern**

- Applying RL to open-ended conversations in Google Assistant [related paper]
- Spot-bonus for delivering to production beyond the internship scope

2017-2020 **Istra Research** **Quantitative Researcher**

- Pricing financial assets using mathematical, statistical & learning tools
- End2end design and development of a new infrastructure for statistical tests
- Development-of and responsibility-over trading in a new geographical asset

EDUCATION

2020- **Technion**

PhD in Electrical Engineering (supervisor: Prof. Shie Mannor)

- Field of research: Reinforcement Learning
- Faculty Excellence Scholarships (2021, 2022 and 2023)
- Vatat Prize for Multidisciplinary Research (The Council for Higher Education, 2022)
- Coordinator of ML Seminar, with external lecturers from various institutions (2023)

2014-2017 Tel-Aviv University

MSc in Applied Mathematics (supervisor: Prof. Yoel Shkolnisky)

- **Summa cum laude**
- Thesis subject: reliability modeling for molecules structural reconstruction
- **M.Sc. Excellence Reward** of the School of Mathematical Sciences (2015)
- Winner of algo-trading contest for excellent MSc students (2014)

2008-2011 Hebrew University

BSc in Mathematics and Physics

- **"Talpiot" excellence program**
- Both private and group tutor in Infinitesimal Calculus (2011)
- Annual Dean's List of Excellent Students (2009)

SOFTWARE

See a sample of my independent code projects and PyPI packages, including:

- Object detection & tracking for traffic analysis in original video dataset
- [Kaggle, silver medal] prediction of upcoming earthquakes from seismic signal
- Crawling of Hebrew news websites, texts classification and semantic embedding
- Visual elevators simulator and analysis of various optimizers
- Numeric calculation of Fisher Information in non-parametric tests

SKILLS

- Languages: Hebrew (native), English (fluent)
- Quantitative modeling and analysis of unstructured problems
- Programming:
  - Expert: Python
  - Competent: C, C++, R, MATLAB
  - Brief experience: Assembly, Java, VBA

All the following skills were specified by supervisors in available written references:

- Quick learner and independent worker
- Creativity and analytical skills
- Outstanding mathematical skills
- Extraordinary written-expression ability

HOBBIES

I enjoy traveling with my friends to both exotic and urban areas around the world. I also enjoy various sport activities, with a particular passion for running and soccer. My soccer team won the National State Cup in 2004, and I was the National Champion in middle-distance running in 2005.